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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,783	06/27/2003	Tertius F. Dreyer	4000-3	9701
23117	7590	02/10/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			HESS, DOUGLAS A	
			ART UNIT	PAPER NUMBER
			3651	
DATE MAILED: 02/10/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/606,783	<b>Applicant(s)</b> DREYER, TERTIUS F.	
	<b>Examiner</b> Douglas Hess	<b>Art Unit</b> 3651	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.  
2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 23 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagerman et al. USP 4314631 in view of Maurer USP 4548316.

Hagerman disclose a similar device comprising a (n):

- Conveyor idler (32) including an outer surface and an inner surface (C2/L39-42)
- Conveyor belt (12)
- Shaft (36)
- Frame (fig. 1)
- Locking mechanism (C2/L39-42) for preventing the sleeve from rotating in the reverse direction

While Hagerman does indeed disclose a braking mechanism inside the conveyor idler (32), he does not comprising at least one brake element which can move between an unlocked position in which the sleeve can rotate in the forward direction, and a locked position in which the locking mechanism element locks the sleeve to the shaft.

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Mauer teaches the use of a similar locking mechanism (fig. 5) comprising at least one brake element which can move between an unlocked position in which the sleeve can rotate in the forward direction, and a locked position in which the locking mechanism element locks the sleeve to the shaft (62) for the purpose of providing for a means to provide for a one-way clutch that prevents reverse rotation of a roller (at least abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the use of a brake element, as taught by Mauer, in the device of Hagerman for the purpose of providing for a means to provide for a one-way clutch that prevents reverse rotation of a roller.

Re clms 2, 3, 4, 5, 6, 7, 8, 9, 11 it would have been obvious in view of Mauer to have employed the use of Outer surface with a plurality of spaced ramps (fig. 5; 65), Ball bearing or roller bearing (62), Rotatable member (on either side of ramps 61 in fig. 6) for the purpose of providing for a means to prevent reverse directional movement of a roller.

Re clm 10, it would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the use of weld connection since connect via welding was well known of at the time of the invention for the purpose of providing for a means to fasten.

3. Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagerman et al. USP 4314631 in view of Maurer USP 4548316.

Hagerman disclose a similar device comprising a (n):

- Idler (32) having an outer surface and an inner surface (C2/L39-42)
- Conveyor belt (12)

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- Shaft (36)
- Frame (fig. 1)
- Braking mechanism (C2/L39-42) for preventing the idler from rotating in the reverse direction.

While Hagerman does indeed disclose a braking mechanism inside the idler (32), he does not disclose the Braking mechanism comprising at least one brake element that can move between a first position in which the idler can rotate in the forward direction, and a second position in which the brake element prevents the idler from rotating in the reverse direction.

Mauer teaches the use of a similar braking mechanism (fig. 5) comprising at least one brake element (62) for the purpose of providing for a means to provide for a one-way clutch that prevents reverse rotation of a roller (abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the use of a brake element, as taught by Mauer, in the device of Hagerman for the purpose of providing for a means to provide for a one-way clutch that prevents reverse rotation of a roller.

Re clms 13-18 it would have been obvious to have employed the use of a brake guide secured to a shaft, brake guide having an outer surface with a plurality of recesses each having a brake surface, said brake element is a ball bearing or a roller bearing, in view of Mauer who teaches a brake guide (61) secured to a shaft (60), brake guide having an outer surface with a plurality of recess (brake element 62 sits in recess) each having a brake surface (65), said brake

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element (62) is a ball bearing or a roller bearing, for the purpose of providing for a means to prevent reverse directional movement of a roller.

a brake guide secured to a shaft, brake guide having an outer surface with a plurality of recess each having a brake surface, said brake element is a ball bearing or a roller bearing, a key and keyway, in view of Maurer who teaches a brake guide (61) secured to a shaft (60), brake guide having an outer surface with a plurality of recess (brake element 62 sits in recess) each having a brake surface (65), said brake element (62) is a ball bearing or a roller bearing, and also teaches a key and keyway (fig. 5)

### ***Conclusion***

4. Applicant's arguments filed October 26, 2006 have been fully considered but they are not persuasive.

Although the roller 32 of Hagerman is above the belt, the examiner asserts that the belt is supported between the roller 32 and the support plate 52, hence, the examiner concludes that Hagerman teaches supporting the belt on plate 52 and roller 32, the roller supporting the plate from moving vertically up. Regarding the lack of a braking effect on the belt by the roller 32, The examiner asserts that anything at all, in contact with the belt provides a frictional factor which would slow the belt, therefore, as long as the belt is in contact with the roller 32 it is providing a minimal braking effect even when the roller is moving in the direction of the belt.

Maurer's braking device is utilized on roller/shaft 60, see figures 5 and 6.

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**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

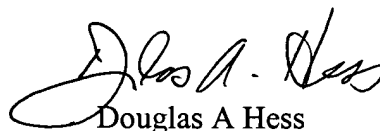
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**6.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas A. Hess whose telephone number is 571-272-6915. The examiner can normally be reached on M-Thurs 5:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571-272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Douglas A Hess  
Primary Examiner  
Art Unit 3651

2-6-06

DAH  
February 6, 2006